#### TENNESSEE SUSTAINABLE HOSPITALITY

# **Energy Conservation**

Energy is critical for so many aspects of hospitality – like keeping the lights on, maintaining a consistent temperature, and running appliances. However, excessive energy usage comes at a big environmental and financial cost. Properties with large footprints or big energy needs are likely to also have large utility bills for power and/or gas. Energy production is also taxing on the environment. To provide energy at your home or business, we use a variety of sources including nuclear, biofuels, coal, natural gas, wind, solar, and water to produce and send energy for your consumption.

While shifts in energy production – like more renewable energy in the place of fossil fuels such as coal - are environmentally preferred, a great way to exercise sustainability is to conserve and use energy efficiently at your business. Not only will this reduce your environmental footprint, but it will also lower your utility bills. As these utility bills savings can produce reductions on your next utility bill, we recommend instituting as many of these practices as you can now and setting aside those financial savings to tackle other sustainability projects!

## **POTENTIAL BENEFITS**

**Financial savings.** Energy bills can account for a large percentage of operational costs - some estimates indicate that these bills make up <u>around 6%</u> of a business's operational costs at large properties. By implementing some of the best practices below, you can lower these recurring expenses and save money!

**Reduce environmental impacts.** All forms of energy generation, even from renewables, create environmental consequences. The most environmentally preferred solution to responsibly managing energy is to conserve this energy through strategies like those listed below.

Tax benefits. Although not explicitly energy conservation, environmentally preferred solutions for energy sourcing, like installing solar panels on-site, can provide tax benefits. Be sure to check current state and federal policies and with the local utility provider to ensure you are getting the most up-to-date information on incentives.

## THIS GUIDE IS APPLICABLE...

#### FOR

✓ Food & Beverage ✓ Lodging ✓ Travel & Tourism ✓ Recreation

#### TO

✓ Management Food Operations

√ Housekeeping Event Planning \( \sqrt{Maintenance & Operations} \) Front of the House



## **BEST PRACTICES**

- Request an energy audit from your utility provider, if offered as an option. Many utility providers will offer an on-site energy audit to assist you in better understanding your energy bill and providing recommendations to lower that bill through energy efficiency upgrades. Check out the <a href="Tennessee Valley Authority's Energy Right page">Tennessee Valley Authority's Energy Right page</a> for more information about incentives, recommendations, and offerings to businesses. If you are unable to get a professional energy audit, consider a <a href="tennesses">to businesses</a>. If you are unable to get a
- **Get to know your energy usage.** It is difficult to strategically reduce energy usage without first knowing what your energy usage looks like. To get a benchmark or baseline of your energy usage, consider using <a href="Energy Star's Portfolio Manager">Energy Usage</a>, which will allow you to track energy (and water!) consumption at your home or business. Once you've established your current energy usage and identified the largest sources of energy consumption, you can use the following strategies to reduce your energy usage and therefore your energy bill.
- Analyze and update lighting. There are many ways to reduce energy usage from lighting at your business. Leverage daylighting as much as possible to avoid using electric lighting, which offers many co-benefits for a business's indoor environment. If using daylight, consider window treatments to control outdoor lighting. Upgrade indoor and outdoor light bulbs to use LED or other efficient bulbs, including those that are EnergyStar certified. Another great way to ensure lights are not used more than needed is to install occupancy sensors so lights turn off automatically in unoccupied areas. For a lower technology solution, consider placing signs near light switches to remind staff and guests to turn off lights when they leave a room.
  - Make sure the building is well insulated. Air leaking in and out of a building can lead to major expenses trying to keep the building at a consistent temperature. Start by sealing cracks around doors, windows, and any other areas where there could be gaps in the wall (such as window or through-the-wall air conditioners) with caulk. Make sure that doors and windows are weather-stripped to further ensure cooled or heated air stays in the building. As much as possible, ensure that walls and attics have insulation in place to likewise prevent loss of hot or cold air.
- Analyze and consider your heating and cooling usage. Heating and cooling a building are huge contributors to energy usage. As a best practice, an HVAC system should be maintained regularly by qualified staff or professionals. Air filters should be regularly changed at minimum, every three (3) months. Installing features such as ceiling fans can make rooms feel cooler during the summer while using a fraction of the energy that is required by air conditioning. To go even further, consider installing and programming a smart thermostat, which can set optimal temperatures for personal comfort and energy savings. Compressors on equipment, such as a beverage cooler, dissipate heat and should never be placed near a thermostat. This will provide false supply air temperatures, triggering the unit to remain in cool mode. For lodges, guest rooms should be reserved in clusters of the hotel as much as possible to avoid heating or cooling sparsely occupied common areas of the building.

## **BEST PRACTICES**

- **Prioritize purchasing energy efficient products.** Major appliances such as televisions, computers, refrigerators, and more can utilize a lot of energy. To reduce energy consumption for these devices, prioritize purchasing energy efficient versions such as those certified by <a href="Energy Star">Energy Star</a>. Many appliances will provide estimates for their annual energy consumption, making for an easy comparison across brands and models.
- Turn off and unplug equipment that is not in use. Appliances that are not in use should be turned off regularly to minimize energy consumption. To take it a step further, unplug devices as much as possible when they are not in use to avoid "energy vampires," also known as "phantom energy," or the energy that is consumed by plugged-in products even when they are turned off. In office settings, it is a best practice to utilize power strips that can be easily shut off when they are not in use.
- Check your water heater. For optimal energy conservation, the water temperature on your water heater should be set between 110- and 120-degrees Fahrenheit. Be sure to follow your local code if there are guidelines about water heater temperature settings. Water heater tanks and water lines may also be insulated to avoid excess heat loss.

## **RESOURCES**

### **EnergyStar**

- Energy Savings Tips for Small Businesses: Lodging
- Energy Savings Tips for Small Businesses: Restaurants
- <u>Treasure Map for</u> <u>Hotels/Motels/Inns</u>

#### **Tennessee Valley Authority**

• Energy Right

## Florida Department of Environmental Protection

• Energy Efficiency

## National Renewable Energy Laboratory

 <u>Maximizing Energy Savings for Small</u> Businesses